

#2

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/843,377

DATE: 05/14/2001
TIME: 09:23:55

Input Set : A:\RTS-0235 Sequence Listing.txt
Output Set: N:\CRF3\05142001\I843377.raw

6 <110> APPLICANT: C. Frank Bennett
7 Andrew T. Watt
9 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF INTERFERON GAMMA RECEPTOR 2 EXPRESSION
11 <130> FILE REFERENCE: RTS-0235
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/843,377
C--> 13 <141> CURRENT FILING DATE: 2001-04-26
13 <160> NUMBER OF SEQ ID NOS: 89
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 20
18 <212> TYPE: DNA
19 <213> ORGANISM: Artificial Sequence
21 <220> FEATURE:
23 <223> OTHER INFORMATION: Antisense Oligonucleotide
25 <400> SEQUENCE: 1
26 tccgtatctcg ctctcaggg
29 <210> SEQ ID NO: 2 20
30 <211> LENGTH: 20
31 <212> TYPE: DNA
32 <213> ORGANISM: Artificial Sequence
34 <220> FEATURE:
36 <223> OTHER INFORMATION: Antisense Oligonucleotide
38 <400> SEQUENCE: 2
39 atgtatctcg ccccaaaagga 20
42 <210> SEQ ID NO: 3
43 <211> LENGTH: 2214
44 <212> TYPE: DNA
45 <213> ORGANISM: Homo sapiens
47 <220> FEATURE:
48 <221> NAME/KEY: CDS
49 <222> LOCATION: (649)...(1662)
51 <400> SEQUENCE: 3
52 gttgactgtgg ggcggggaggt gcagtggagcc gagatcgccc cactgcactc cagccctggtg 60
54 actcccgcttc aaaaaaaaaagg ggagggggggc gggggagagt tgaaacctt atatgtactt 120
55 tgggggtctat taacgaaac atttcgacta aaggggcgaa tcttcgaaat gtgcgatcaa 180
58 gcaccccgaga ggagagtgg ggggggtcaag gagggttgg ggctccagg aacgccccgg 240
60 ggccctggcc ggggttctcg gggggcccttc cggaaaggatc gccggccccc aagggtggcg 300
62 tccccggggg ctcccgatctc caggacgttc cggggaggctc cgcgccttcgg gaggccgcgt 360
64 gctgtggggtc ccccgctgtc agcccgatag gcccccccaagg gccgcgggttc cggaggccgg 420
66 aaaggatccgcg cggggggccgg tgcccttggg ggcggggaggc gccggggccgg gggggccgg 480
68 cggccggccgaa tggcccttc caccggggacg ccccgctgtcc gctccggaaatggccggcc 540
70 tgcgcggccct cgggtcgccca tggccgggttgg ggcggccggacg tgacggccgtc cccggacc 600
72 gagccggggcc cccggccggca cctgagccgc cccggccgcg cccggccgcg 15 657
73 Met Arg Pro
74 1
76 acg ctg ctg tgg tcc ctg ctg ctg ctc gga gtc ttc gcc gcc gcc 705
77 Thr Leu Leu Trp Ser Leu Leu Leu Leu Gly Val Phe Ala Ala Ala
78 5 10 15

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80	gcc	gct	gcc	ccg	cca	gac	cct	ttt	tcc	cag	ctg	ccc	gct	cct	cag	cac	753
81	Ala	Ala	Ala	Pro	Pro	Asp	Pro	Leu	Ser	Gln	Ieu	Pro	Ala	Pro	Gln	His	
82	20			25				30					35				
84	ccg	aag	att	ccg	ctg	tac	aac	gca	gag	cag	gtc	ctg	agt	tgg	gag	cca	801
85	Pro	Lys	Ile	Arg	Leu	Tyr	Asn	Ala	Glu	Gln	Val	Leu	Ser	Trp	Glu	Pro	
86				40				45					50				
88	gtg	gcc	ctg	agc	aat	agc	acg	agg	cct	gtt	gtc	tac	cga	gtg	cag	ttt	849
89	Val	Ala	Leu	Ser	Asn	Ser	Asn	Arg	Pro	Val	Val	Tyr	Arg	Val	Gln	Phe	
90				55				60					65				
92	aaa	tac	acc	gac	agt	aaa	tgg	ttc	acg	gcc	gac	atc	atg	tcc	ata	ggg	897
93	Lys	Tyr	Thr	Asp	Ser	Lys	Trp	Phe	Thr	Ala	Asp	Ile	Met	Ser	Ile	Gly	
94				70				75					80				
96	gtg	aat	tgt	aca	cag	atc	aca	gca	aca	gag	tgt	gac	tcc	act	gcc	gcc	945
97	Val	Asn	Cys	Thr	Gln	Ile	Thr	Ala	Thr	Glu	Cys	Asp	Phe	Thr	Ala	Ala	
98				85				90					95				
100	agt	ccc	tca	gca	ggc	ttc	caa	atg	gtt	aat	gtc	act	cta	cgt	ctt		993
101	Ser	Pro	Ser	Ala	Gly	Phe	Pro	Met	Asp	Phe	Asn	Val	Thr	Ieu	Arg	Leu	
102	100			105				110					115				
104	cgt	gct	gag	ctg	gga	gca	ccg	ctc	cat	tct	gcc	tgg	gtg	aca	atg	cct	1041
105	Arg	Ala	Glu	Leu	Gly	Ala	Leu	His	Ser	Ala	Trp	Val	Thr	Met	Pro	Trp	
106				120				125					130				
108	ttt	caa	cac	tat	cggt	aat	gtg	act	gtc	ggg	cct	cca	gaa	aac	att	gag	1089
109	Phe	Gln	His	Tyr	Arg	Asn	Val	Thr	Val	Gly	Pro	Pro	Glu	Asn	Ile	Glu	
110				135				140					145				
112	gtg	acc	cca	ggg	aaa	gga	gaa	ggc	tcc	ctc	atc	atc	agg	ttc	tcc	tcc	1137
113	Val	Thr	Pro	Gly	Gly	Ser	Ile	Ile	Ile	Arg	Phe	Ser	Ser	Pro	Phe		
114				150				155					160				
116	gac	atc	gtt	gtt	acc	ttt	ttt	tgt	tat	tat	gtc	cat	tac				1185
117	Asp	Ile	Ala	Asp	Thr	Ser	Thr	Ala	Phe	Phe	Cys	Tyr	Tyr	Val	His	Tyr	
118				165				170					175				
120	tgg	aaa	gga	gga	atc	caa	cag	gtc	aaa	ggc	cct	ttc	aga	agc	aac		1233
121	Trp	Glu	Lys	Gly	Gly	Ile	Gln	Gln	Val	Lys	Gly	Pro	Phe	Arg	Ser	Asn	
122	180			185				190					195				
124	tcc	att	tca	tgg	gtt	gat	aaa	tta	aaa	ccc	tcc	aga	gtg	tac	tgt	tta	1281
125	Ser	Ile	Ser	Leu	Asp	Asn	Leu	Lys	Pro	Arg	Val	Tyr	Cys	Leu	Gln		
126				200				205					210				
128	gtc	cag	gca	caa	ctg	ctt	tgg	aac	aaa	agt	aac	atc	ttt	aga	gtc	ggg	1329
129	Val	Gln	Ala	Gln	Leu	Leu	Trp	Asn	Lys	Ser	Asn	Ile	Phe	Arg	Val	Gly	
130				215				220					225				
132	cat	tta	agg	aac	ata	tct	tgc	tac	gaa	aca	atg	gca	gtt	gcc	tcc	act	1377
133	His	Leu	Ser	Asn	Ile	Ser	Cys	Tyr	Glu	Thr	Met	Ala	Asp	Ala	Ser	Thr	
134				230				235					240				
136	gag	ctt	cag	caa	gtc	atc	tcc	tgt	ggg	aca	ttt	tcg	tgt	ctg			1425
137	Gly	Leu	Gln	Val	Ile	Ile	Ser	Val	Gly	Thr	Phe	Ser	Leu	Ile			
138				245				250					255				
140	tcg	gtg	ctg	gca	ggg	gcc	tgt	ttc	tcc	gtc	ctg	aaa	tat	aga	ggc		1473
141	Ser	Val	Leu	Ala	Gly	Ala	Cys	Phe	Phe	Leu	Val	Leu	Lys	Tyr	Arg	Gly	
142	260			265				270					275				
144	ctg	att	aaa	tac	tgg	ttt	cac	act	cca	cca	agc	atc	cca	tta	cag	ata	1521

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Output Set: N:\CRF3\05142001\1843377.raw

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DATE: 05/14/2001

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Input Set : A:\RTS-0235 Sequence Listing.txt
Output Set: N:\CRF3\05142001\I843377.raw

225 <220> FEATURE:
 227 <223> OTHER INFORMATION: PCR Primer
 229 <400> SEQUENCE: 7
 230 *gaagggtgaag stcgggatc* 19
 233 <210> SEQ ID NO: 8
 234 <211> LENGTH: 20
 235 <212> TYPE: DNA
 236 <213> ORGANISM: Artificial Sequence
 238 <220> FEATURE:
 240 <223> OTHER INFORMATION: PCR Primer
 242 <400> SEQUENCE: 8
 243 *gaagatggt atgggattc* 20
 246 <210> SEQ ID NO: 9
 247 <211> LENGTH: 20
 248 <212> TYPE: DNA
 249 <213> ORGANISM: Artificial Sequence
 251 <220> FEATURE:
 253 <223> OTHER INFORMATION: PCR Probe
 255 <400> SEQUENCE: 9
 256 *caaggcttccg ttcttcagcc* 20
 259 <210> SEQ ID NO: 10
 260 <211> LENGTH: 339
 261 <212> TYPE: DNA
 262 <213> ORGANISM: Homo sapiens
 264 <220> FEATURE:
 266 <400> SEQUENCE: 10
 267 *ttttagtoga aatgtttgtc ttaatagccc ccaaagtaca tattaagttt tcaactctcc* 60
 269 *cccgcccccc tccccctttt tttagacgg agtcaccagg ctggatgtca gtggggcgat* 120
 271 *ctcggtctcac tgcacacccccc gcctccggatc aacccatatt tgaaagggt tttaaggggaa* 180
 273 *agggtttaga aagggtcccg tgaaggaggaa ggtggggctc tgggggtggg gggatggcc* 240
 275 *tccgagcagg gggaggggaga gacagaaact tccagattt ctaatggcg tgggggtttgc* 300
 277 *cctggagccg gccggcggtgc acggatggaa agtcccttta* 339
 279 <210> SEQ ID NO: 11
 280 <211> LENGTH: 54000
 281 <212> TYPE: DNA
 282 <213> ORGANISM: Homo sapiens
 284 <220> FEATURE:
 285 <221> NAME/KEY: exon
 286 <222> LOCATION: (514)...(1420)
 287 <223> OTHER INFORMATION: Exon 1
 289 <221> NAME/KEY: intron
 290 <222> LOCATION: (1421)...(12692)
 291 <223> OTHER INFORMATION: Intron 1
 293 <221> NAME/KEY: exon
 294 <222> LOCATION: (12693)...(12825)
 295 <223> OTHER INFORMATION: Exon 2
 297 <221> NAME/KEY: intron
 298 <222> LOCATION: (12826)...(19284)
 299 <223> OTHER INFORMATION: Intron 2

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Input Set: A:\RTS-0235 Sequence Listing.txt
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301 <221> NAME/KEY: exon
302 <222> LOCATION: (19285)...(19490)
303 <223> OTHER INFORMATION: Exon 3
305 <221> NAME/KEY: intron
306 <222> LOCATION: (19491)...(24688)
307 <223> OTHER INFORMATION: Intron 3
309 <221> NAME/KEY: exon
310 <222> LOCATION: (24689)...(24837)
311 <223> OTHER INFORMATION: Exon 4
313 <221> NAME/KEY: intron
314 <222> LOCATION: (24838)...(29981)
315 <223> OTHER INFORMATION: Intron 4
317 <221> NAME/KEY: exon
318 <222> LOCATION: (29982)...(30141)
319 <223> OTHER INFORMATION: Exon 5
321 <221> NAME/KEY: intron
322 <222> LOCATION: (30142)...(30518)
323 <223> OTHER INFORMATION: Intron 5
325 <221> NAME/KEY: exon
326 <222> LOCATION: (30519)...(30676)
327 <223> OTHER INFORMATION: Exon 6
329 <221> NAME/KEY: intron
330 <222> LOCATION: (30677)...(34632)
331 <223> OTHER INFORMATION: Intron 6
333 <221> NAME/KEY: exon
334 <222> LOCATION: (34633)...(35318)
335 <223> OTHER INFORMATION: Exon 7
337 <400> SEQUENCE: 11
338 ggcttgtctt caactccctgg ctcatgtga tcggccccc tcggcctctt aaagtgtctga 60
339 gattacaggc gtgagccacc gggctggca tcatgtcata ctttttaag tgattcaag 120
340 ttatcgcccg cttttttctgt gtaacatata aatacatctc tggatcttgc aataatccat 180
341 gcaataatccat atgttcgtcg aggttattca tcacgttattt tcacgagcgtt ggccaatttc 240
342 aaaaatagtc tacaaggag aatgtcaaga atgtggggaa agccaaagaa aagctctatg 300
343 ttggaaaccc ttttttttgtt acgtgttcc ggggttcc gggagacgtt gtttttaat 360
344 tcttggtctt ctcgtcacccy gtcgcctctt tgcgtgcata gttttatgc gatcttgg 420
345 agaaacaggc agatttaaa aacctctccat acaggctgtca aacgacatgg tgcaggctcg 480
346 ggctgggggg cggcccttgcg qctgtccca gtcataaaggc cttctactc gtgcacccg 540
347 ggcgcgttcca gggcaaaaacc caccgcattt agaaatgtc gaatttctg ttctccctt 600
348 cccctgtctg gagggccatc ccccccacccc cagagccca ctccttcctt caetggggcc 660
349 ttctctaactc cttcccttta aaacccctttt caaatgggg ttgactgtgg ggggggggtt 720
350 cagtgcggcc agatgcggcc actgcactcc agctctgtttt cttccgttca aaaaaaaagg 780
351 gagggggggc gggggaggtt gaaagttttat tttttttttt gggggcttta aagcaaca 840
352 ttctgcactaa agggggcgtt ctcgtcaattt tgctgtcaat caccggagag gagagttgg 900
353 ggggggttcaag aggggtgggg gtcgcggggg aacggccgggg gttttttttt ggggttccgg 960
354 gggccgttcca gggaggatcg cggccccccgga aggttgggtt cccggggggc tccagttttcc 1020
355 aggacgttcc gggaggatcg cggccccccgga aggttgggtt cccggggggc tccagttttcc 1080
356 ggcgcacaggc ccccccacaggc cccgggttcc cggacggggaa aagttccggcg cgggggggg 1140
357 ggccctgggg gggggacggg cggggggggc gggggggggc gggcggggc aatccccctcc 1200
358 accggggacgc cccgcgtctt ctcggaaaga ggccggccctt ggcggccctt cgcgtccat 1260

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/843,377

DATE: 05/14/2001
TIME: 09:24:56

Input Set : A:\RTS-0235 Sequence Listing.txt
Output Set: N:\CRF3\05142001\1843377.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date